

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,185	08/15/2001	Brian Bramlett	5038-75	1411
7590 12/31/2003			EXAMINER	
MARGER JOHNSON & McCOLLOM, P.C.			KIM, PETER B	
1030 SW Morrison Street Portland, OR 97205			ART UNIT	PAPER NUMBER
			2851	
			DATE MAILED: 12/31/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
		09/931,185	BRAMLETT ET AL.
	Office Action Summary	Examin r	Art Unit
		Peter B. Kim	2851
P ri d fo		unication appears on the cover sheet wi	ith the correspondence address
THE - Exte after - If the - If NO - Failu - Any	MAILING DATE OF THIS COMMU- nsions of time may be available under the provisi SIX (6) MONTHS from the mailing date of this con experiod for reply specified above is less than thirt o period for reply is specified above, the maximum are to reply within the set or extended period for re-	ons of 37 CFR 1.136(a). In no event, however, may a nonmunication. y (30) days, a reply within the statutory minimum of thirt n statutory period will apply and will expire SIX (6) MON apply will, by statute, cause the application to become AB hs after the mailing date of this communication, even if the	reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
	Responsive to communication(s)	filed on 04 November 2003.	
· _	This action is FINAL .	2b)⊠ This action is non-final.	
,	Since this application is in condition	on for allowance except for formal matt actice under Ex parte Quayle, 1935 C.D	
Disposit	ion of Claims	•	
4)⊠	Claim(s) 1-22 is/are pending in th	e application.	
• / 🖂	· · · — · · · · ·	s/are withdrawn from consideration.	
5)□	Claim(s) is/are allowed.		
6)⊠	Claim(s) 1-22 is/are rejected.		
7)	Claim(s) is/are objected to	· •	
8)[Claim(s) are subject to res	triction and/or election requirement.	
Applicat	ion Papers		
9)[The specification is objected to by	the Examiner.	
10)	The drawing(s) filed on is/a	re: a) accepted or b) objected to	by the Examiner.
	Applicant may not request that any o	bjection to the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).
		ling the correction is required if the drawing	
11)	The oath or declaration is objected	d to by the Examiner. Note the attached	d Office Action or form PTO-152.
Priority	under 35 U.S.C. §§ 119 and 120		
a)	 All b) Some * c) None of the prior Certified copies of the prior Copies of the certified copies application from the Internal 	ity documents have been received. ity documents have been received in A es of the priority documents have been ational Bureau (PCT Rule 17.2(a)).	Application No I received in this National Stage
.13)∏ / s 3	Acknowledgment is made of a clair since a specific reference was inclu 37 CFR 1.78.	ction for a list of the certified copies not m for domestic priority under 35 U.S.C. ided in the first sentence of the specific	§ 119(e) (to a provisional application) ation or in an Application Data Sheet.
		language provisional application has b	
		m for domestic priority under 35 U.S.C. entence of the specification or in an Ap	
Attachmer	nt(e)		
Attachmer 1) Notice	ce of References Cited (PTO-892)	4) 🗍 Interview S	Summary (PTO-413) Paper No(s)
2) Notice	ce of Draftsperson's Patent Drawing Review	w (PTO-948) 5) D Notice of I	Informal Patent Application (PTO-152)

Application/Control Number: 09/931,185

Art Unit: 2851

DETAILED ACTION

Applicant's arguments filed on Nov. 4, 2003 have been fully considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 11-13, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faris et al. (Faris).

Faris discloses in fig. 10A, a light projection apparatus and method with a light source (95), a dynamic patterning means, (10") LCD matrix, interposed within the light path. Faris discloses a mirror (105) having central axis at an oblique angle to the light and means for tilting the mirror. Although, Faris doe not disclose a steering means, it is well known overhead projectors have image projection head (99) which is tiltable so that the light pattern can be directed in a desired direction including first and second directions. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide an image projection head which can be tilted in order to direct the light to a desired direction.

Claims 2-9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faris et al. (Faris) in view of Mueller et al. (Mueller).

Faris discloses the claimed invention as discussed above. However, Faris does not disclose using LEDs. Mueller discloses in the abstract and in col. 2, line 63 - col. 3, line 60, a

Application/Control Number: 09/931,185

Art Unit: 2851

light projection apparatus and method using LEDs of different lights as the light source.

Although Faris does not disclose selectively actuating pixels of transmissive LCD matrix, such function is inherent for LCD matrix. LCD matrix allows control of the pixels to form images and selectively allow light to pass. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the LEDs of different color to the invention of Faris in order to obtain colorful images as taught by Mueller in col. 2, lines 5-10.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faris et al. (Faris) in view of Mueller et al. (Mueller).

Faris discloses in fig. 10A, a light projection apparatus and method with a light source (95), a dynamic patterning means, (10") LCD matrix, interposed within the light path. Faris discloses a mirror (105) having central axis at an oblique angle to the light and means for tilting the mirror. Although Faris does not disclose selectively actuating pixels of transmissive LCD matrix, such function is inherent for LCD matrix. LCD matrix allows control of the pixels to form images and selectively allow light to pass. Although, Faris doe not disclose a steering means, it is well known overhead projectors have image projection head (99) which is tiltable so that the light pattern can be directed in a desired direction including first and second directions. Faris also does not disclose using LEDs. Mueller discloses in the abstract and in col. 2, line 63 – col. 3, line 60, a light projection apparatus and method using LEDs of different lights as the light source. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the LEDs of different color to the invention of Faris in order to obtain

Application/Control Number: 09/931,185

Art Unit: 2851

colorful images as taught by Mueller in col. 2, lines 5-10 and to provide an image projection head which can be tilted in order to direct the light to a desired direction.

Response to Arguments

In response to the arguments, the Faris reference is used in a 103 rejection to show that it is obvious to provide a steering means to the invention of Faris.

Applicant also argues that it would not be obvious to provide LED lights of Mueller to Faris; however, LED is a light source just as "white light" of Faris is a light source. Thus, it would be obvious to replace one type of light source with another in order to provide image with color.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Suzuki (US 5,122,831) and Saita (5,663,782) are included to show that it is obvious to replace a white light with an LED light.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Kim whose telephone number is (703) 305-0105 (new number after Jan. 29, 2004 is 571-272-2120). The examiner can normally be reached on Monday-Thursday from 8:30 AM to 6:00 PM. The examiner can also be reached on alternate Fridays during the same hours.

Art Unit: 2851

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703 308 2847. The fax phone numbers for the organization where this application or proceeding is assigned is 703 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308- 0956.

Peter B. Kim

Patent Examiner

December 19, 2003